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Goddard Space Flight Center

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# Inside Wallops



I am truly proud of your accomplishments during 1997.

You performed superbly in meeting our customer's needs and you stepped up to meet challenges during the year with great professionalism. In many instances you disrupted your private lives and were taken away from your families.

I thank you for your dedication and sacrifices, and I thank your families.

I hope you will find time during the holidays to reflect on your accomplishments, to spend time with those closest to you, and to prepare for the coming year. 1998 looks to be an even more ambitious and exciting year for Wallops.

Happy Holidays and New Year,

Arnold L. Torres



## ***NASA Payload to Monitor Atmosphere During Solo Spirit Balloon Flight Around the World***

A NASA science instrument package that may one day study the atmosphere of Mars or Venus will fly aboard adventurer/businessman Steve Fossett's Solo Spirit balloon in December, as he makes his second attempt to be the first person to fly solo around the world.

The prototype instrumentation is being provided by NASA's Jet Propulsion Laboratory (JPL). The 7.5-pound package will measure the balloon's latitude, longitude and elevation, and the surrounding atmospheric temperature, pressure, humidity and vertical wind velocity. The scientific data and knowledge gained from the flight will be used by Earth scientists in coordination with the Office of Mission to Planet Earth.

The science payload will gather information from the troposphere

during a continuous, two-week period as the balloon flies through the mid-northern latitudes. Fossett's balloon is expected to fly at an average altitude of about 23,000 feet.

Eventually, a version of the NASA prototype may fly in the atmosphere of Mars or Venus, on a robotic balloon called an aerobot. Like Fossett's balloon, the aerobot would vary its altitude to steer through the atmosphere.

Fossett will launch from St. Louis's Busch Stadium when flying conditions are optimal. This winter's flight is expected to last 15 days. The launch window opens in mid-December and closes at the end of January 1998.

To follow Fossett's flight, visit: <http://www.wustl.edu/solo/>

## ***Tanks for the water!***

A 100,000 gallon elevated water tank has been constructed across the street from Building F-160 by Caldwell Tanks Inc., Louisville, KY. The new tank replaces the red and white water tank, built by the Navy in 1949, that was to the north end of Building F-6.



The new tank provides an antenna platform at the top of the structure. The platform is accessed via a dry tube extending through the internal structure of the tank.

A transmitter building located adjacent to the tank will be used for an upgraded Wallops communications system. The project was designed and managed by the Wallops Facilities Management Branch, Code 228.

## ***X-34 Fastrac Engine Passes Critical Tests***

A critical series of tests on a rocket engine that could power the next generation of space launch vehicles has been successfully completed at the Marshall Space Flight Center. The Fastrac engine will be the primary propulsion system for the X-34 technology demonstration vehicle scheduled to begin flight tests in late 1998.

X-34 is next in NASA's series of Reusable Launch Vehicle (RLV) technology demonstrators set for up to 25 flights beginning late next year. X-34 is an air-launched vehicle being developed under contract to Orbital Sciences Corporation.

The X-34 is intended to demonstrate technologies ranging from composite structures and reusable propellant tanks and insulation to advanced thermal protection systems and low-cost avionics. The Mach-8 craft will begin flights at the White Sands Missile Range and could include missions through inclement weather conditions in Florida. X-34 demonstrations will precede the more advanced X-33 technology demonstrator scheduled to begin flights up to Mach 15 in mid-1999.

Recently completed Fastrac engine component tests evaluated the engine's thrust chamber assembly at high pressure almost identical to flight conditions.

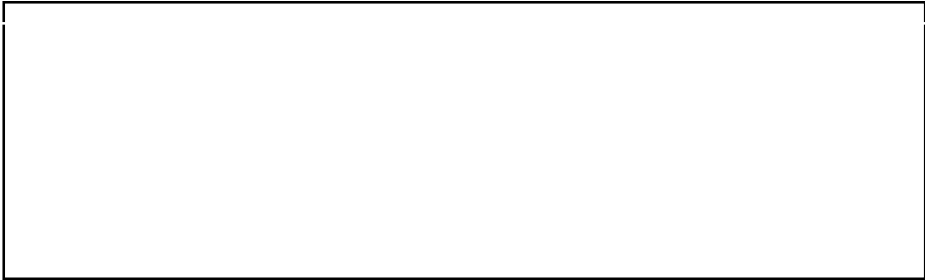
"The thrust chamber assembly performed as designed, which is another indication that the Fastrac is an engineering breakthrough," said George Young, Fastrac engine chief engineer. "Marshall engineers developed this engine in a much shorter-than-usual design cycle at significantly lower costs than a typical rocket engine."

"These tests demonstrate that a key component of our simple, low-cost engine performs in flight-like conditions," said Danny Davis, manager of the Low Cost Technologies project. "These successful test firings of the thrust chamber mark a major milestone in the progression to low-cost space propulsion."

Each Fastrac engine initially will cost approximately \$1 million. The Fastrac provides 60,000 pounds of thrust and is targeted for launch systems designed to boost payloads weighing up to 500 pounds at a dramatically lower cost.



The Wallops Cafeteria  
will be closed  
Dec. 22 through Dec. 26.  
Happy Holidays from  
the Cafeteria Staff!!



**Wallops Awards Ceremony Held**

The following is a listing of individuals recognized at the annual Wallops Awards ceremony held Dec. 12, 1997.

**45 Years of Service.....**                      **40 Years of Service.....**  
Frank Schmidlin                      David Suiter, Jr.

**35 Years of Service.....**                      **30 Years of Service.....**  
Jack Merrill                      Alan Selser                      Lucille Fox                      Frank Lau  
Pat Bradley                      Jan Neville                      Doug Young  
Bobby Wessells                      Dean Price  
Riley Bull                      Terry Spurley

**25 Years of Service.....**  
Timothy Abbott                      Chico Ayers                      Don Langley  
Dollie Harrison                      Bruce Scott  
Rob Beyma

**NASA Exceptional Service Medal.....**  
David Pierce                      Ray Stanley

**NASA Group Achievement Awards.....**  
Navigation Aids Flight Certification Team  
Total Ozone Mapping Spectrometer EP Mission Team

**GSFC Community Service Award.....**  
Wanamaker Lawrence

**GSFC Exceptional Achievement Award.....**  
Claudia Fulk                      Brantley Furness                      Drew Green                      David Burkhead

**GSFC Group Achievement Awards.....**  
Wallops Range Control Center Software Support Team  
GSFC Strategic Plan Team  
President’s Award Application Team  
ADEOS Automation Team

**WEMA/MAC Volunteer of the Year.....**  
Gerry McIntire



**Wallops on  
the Road**

Doug Young, Code 831, participated in the Mary N. Smith Middle School Career Day on Nov. 18.

Betty Flowers, Code 130; Scott Webb, Code 228; and Mike Bundick, Code 251.3, represented Wallops at the Northampton Middle School Career Day on Nov. 19.

Wallops Fire Department personnel participated in the Chincoteague Christmas Parade on Dec. 6.

**Exchange Sale in Progress**

Now is the time to get the NASA sweatshirt you’ve wanted. The annual Christmas sale at the Wallops Exchange will continue through Dec. 24.

Since the entire stock has been reduced 25 to 30%, it’s a great time to do last minute Christmas shopping. Whether it’s a toy or NASA cap, you’ll find a nice selection of gifts for children and adults.

Stop by the Exchange, located in the front of Bldg. E-2 between 8:30 a.m. and 4 p.m., Monday through Friday, or call Karen on x2020.

**Career Counselor Visits**

Mark your calendars! Mac Saddoris, Wallops’s Career Counselor, will be on site December 17, 18, and 19.

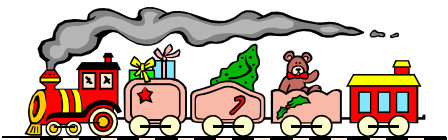
Why would you visit a Career Counselor? Lately, career conversations have focused on how employees fit into the reorganization of the Center. Everyone needs to revisit issues concerning their career in order to find clarity of purpose in what you are doing. Make an appointment by calling Mac Saddoris at 66-5794.

**For Sale:** Couch and swivel rocker - \$400; kitchen table w/4 chairs - \$100; kitchen table w/2 chairs - \$50. All items in excellent condition. Call 410-651-5824 after 6 p.m.

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**Children’s Christmas Party**  
Monday, Dec.22  
Building F-3  
6 to 9 p.m.

Register by calling Rebecca Johnson x1559, Nicole Turner x2234, Cheryl Johnson x1607, or Karen Downing x2163. Sponsored by the Morale Activities Committee and Black History Club.

**Extra Christmas  
Holiday**

*President Clinton officially designated Dec. 26 as a paid holiday for federal workers. NOTE: Employees who have scheduled use or lose annual leave for that day need to use the leave by Jan. 3, 1998*

**Combined Federal Campaign Successful**

Pledges for this year’s Combined Federal Campaign reflect a moderate increase over last year. Even though Wallops had a 10% reduction in civil service workforce, new contributors increased by almost 10%. According to Robert Nock, Code 821, Wallops Chairperson, pledges totaled \$14,373. This a 15% increase over last year’s total.

Nock would like to thank everyone who made pledges and offers a special word of thanks to the key workers: John Brinton, Sherry Kleckner, Sheryl Lewis, Cheryl McCready, Charlotte Williams, Claudia Fulk, Felipe Arroyo, David Lassiter, Jay Pittman, Stan Williams, Prasad Hanagud, Dorine Trent, Jack Vieira, Terry Tinker, Joel Simpson, and Dave Clem.